

SIMATIC OP27/OP37

Operator Panels — compact, smart and powerful

Product Brief

Equipped with graphic displays, the Operator Panels allow easy operation and monitoring in the production area. Critical process operation can be monitored easily by graphical representations such as imported pictures, bargraphs and trends. The embedded alarm system provides immediate process information either on the screen or through a printer.

With SIMATIC® ProTool® – the Windows® based configuration software you can easily build your own application.

Operator Panels in different versions:

- **OP27** STN display monochrome or color
- **OP37** STN or TFT, optional with floppy drive

PLC communications:

Integrated interfaces provides you communication with

- SIMATIC S7
- SIMATIC 505
- SIMATIC S5
- via PROFIBUS-DP to SIMATIC S5/S7 (up to 12 Mbps)
- Allen Bradley
- AEG Modicon
- Telemecanique
- Mitsubishi
- OMRON
- GE Fanuc

Suitable for industrial applications:

- Recipe Management
- Displaying process information
- Backup / Restore for configuration files on PC-Card
- powerful integrated alarm system
- integrated printer port
- Service tools (read/write PLC data, SIMATIC F5/S7)

SIMATIC HMI



Technical Data

	OP27	OP37
Display	Liquid Crystal Display (LCD), backlit (Cold Cathode Fluorescence Lamps)	
Physics	passive, STN	passive, STN or active, TFT
Resolution (Pixels)	320 x 240	640 x 480
display dimensions	115 x 86 (5,7")	211 x 158 (10,4")
Representation	monochrome (8 grey levels) or color (8 colors)	color (8 colors)
MTBF backlit	CCFL-bulb	CCFL-bulb
at 25°C	Mono: 50000 h; color: 40000 h	STN: 50000 h, TFT: 25000 h
Keyboard (membrane)		
System Keys	24	32
Function Keys (K)	10 (10 with LED's)	16 (16 with LED's)
Softkeys (F)	14 (8 with LED's)	20 (12 with LED's)
Direct Keys DC 24 V/Outputs	8 ¹⁾ / 8; optional	12 ¹⁾ / 16; optional
Processor	80486 / 33 MHz	Pentium / 100 MHz
Memory		
Firmware/user memory (integrated)	1/2 (Monochrome/Color) MByte Flash-EPROM	2 MByte Flash-EPROM
Main memory DRAM	2/4 (Monochrome/Color) MByte	8 MByte
Main memory SRAM	128 KByte, (battery backup)	128 KByte, (battery backup)
Floppy-Disk	—	3,5" / 1,44 MByte, optional
PC-Card slot	Type 2	Type 2
Interfaces		
IF1/A:	TTY (active/passive), RS232-C	TTY (active/passive), RS232-C
IF2:	TTY (active/passive), RS232-C	TTY (active/passive), RS232-C
IF1/B:	RS 422, RS 485	RS 422, RS 485
LPT1:	—	TTL (parallel)
Power Supply	24 V DC (18 ... 30V)	24 V DC (18 ... 30V)
Current	typ. 0,3A at 24V (without options)	1,6A at 24V (without options)
Hardware clock	yes, battery backup	yes, battery backup
Protection (front/back)	IP65 / IP20	IP65 / IP20
Dimensions		
front plate (WxH) mm	296 x 192	482 x 310
cut out dimension (WxHxD) mm	282 x 176 x 59 ²⁾	436 x 295 x 88 ²⁾
Environment		
Installation position	Vertical	Vertical
● max. permissible angle of orientation without assisted ventilation	±35°	±35° or ±25° with floppy drive
Temperatures		
● Operation to 10° angle of orientation	0 to +50°C	+4 to +45°C
● Operation to 35° angle of orientation	0 to +40°C	+4 to +40°C
● transportation/storage	-20 to +60°C	-20 to +60°C
humidity		
● operation	≤ 95% RH, non-condensing	≤ 95%, non-condensing
● transport	≤ 95% RH	≤ 95%
Features	All numbers below represent the maximum-number for the individual features The total number is limited by the size of the User memory.	
Alarm system		
event messages and alarm messages		up to 2000 each
messages length (lines x char.)	2 x 35	1 x 70
number of registers per message		8
help text with messages		7 x 35 char.
message buffer		512 messages in FIFO
Recipes		
number of recipes	max.	255
data records per recipe	max.	500
entries per data record	max.	500
Screens		
number of screens	max.	300
pixel graphic		importing pixel graphic objects from standard drawing packages during configuration
symbol graphic		yes
character fonts	max.	4
dynamic objects		Input, Output, Date, Time, Symbolic Input, Symbolic Output
		Analog representation such as bargraphs and trends, etc.
help texts with inputs		7 x 35 char.
Online languages		3
Password levels		9
Configuration software	SIMATIC ProTool, runs under Windows	

¹⁾ no additional keys, but using existing keys to connect to digital outputs

²⁾ Depth without options, OP27: D=91 mm with 24 V DC-direct control keys module or control panel interface; OP37: D=118 mm with 24 V DC-direct control keys module or control panel interface; D=138 mm with disk drive; D incl. cable inlet or +15 mm for cable inlet in the case of 24 V DC direct control keys module